

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A method of preparing a cartilage, comprising:
culturing cells to form spheroids;
shaping a carrier into a desired form;
contacting at least one surface of the form with a plurality of the spheroids to permit the spheroids to adhere to the surface, wherein ~~adhering cell masses onto the surface of a~~ the carrier ~~shaped into a desired form~~ has micropores smaller than the spheroids; and
culturing the ~~spheroids adhered to the surface~~ cell masses under conditions which induce the spheroids to fuse to each other and to produce new cartilage tissue on the surface
differentiation of the cell masses into a cartilage tissue.
2. **(Currently Amended)** A method of preparing an artificial joint, comprising:
culturing cells to form spheroids;
forming a carrier into at least a part of a desired joint;
contacting at least one surface of said at least a part of a desired joint with a plurality of the spheroids to permit the spheroids to adhere to the surface, wherein ~~adhering cell masses onto the surface of a~~ the carrier ~~shaped into a form of a desired joint~~ has micropores smaller than the spheroids; and
culturing the ~~spheroids adhered to the surface~~ cell masses under conditions which induce the spheroids to fuse to each other and to produce new cartilage tissue on the surface thereby producing an artificial joint
differentiation of the cell masses into a cartilage tissue.
3. **(Currently Amended)** The method according to claim 2, wherein the new cartilage tissue on the joint surface is formed with by the cells, matrices produced by the cells, or a combination thereof.
4. **(Cancelled)**
5. **(Original)** The method according to claim 1 or 2, wherein the cells are mesenchymal stem cells or chondrocytes.

6. **(Currently Amended)** The method according to claim 1 or 2, wherein the ~~culture~~ culturing of the adhered spheroids is performed *ex vivo* and in the presence of a growth factor(s).
7. **(Currently Amended)** The method according to claim 1, wherein ~~said cell masses comprise mesenchymal stem cells or chondrocytes and~~ said carrier comprises calcium triphosphate having micropores with a diameter of 10-500 microns.
8. **(Currently Amended)** The method according to claim 2, wherein ~~said cell masses comprise mesenchymal stem cells or chondrocytes and~~ said carrier comprises calcium triphosphate having micropores with a diameter of 10-500 microns.
9. **(Currently Amended)** The method according to claim 7, wherein said cells are human bone marrow-derived mesenchymal stem cells and said form ~~carrier~~ has a curved surface to which said ~~cells~~ spheroids adhere.
10. **(Currently Amended)** The method according to claim 9, wherein said ~~cells~~ spheroids are cultured in the presence of TGF-beta for a time sufficient for the cell masses to adhere onto said curved surface and to fuse to each other.
11. **(Currently Amended)** The method according to claim 8, wherein said cells are chondrocytes and said ~~carrier~~ form has a curved surface to which said ~~cells~~ spheroids adhere.
12. **(Currently Amended)** The method according to claim 11, wherein said ~~cells~~ spheroids are cultured in the presence of TGF-beta for a time sufficient for the cell masses to adhere onto said curved surface and to fuse to each other.